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### Attachment 1 - Labor Categories and Qualifications

For all labor categories, the position levels are progressive. Level 2 staff is expected to possess any and all competencies and be able to perform any and all functions of Level 1 staff. Level 3 staff is expected to possess any and all competencies and be able to perform any and all functions of both Level 1 and Level 2 staff.

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Note: The Government reserves the right to negotiate with the contractor to add labor categories to the contract to acknowledge changes in the future marketplace.

## **Program/Project Manager/Director (PPM)**

### **General Description:**

The Program/Project Manager/Director oversees and orchestrates IT systems development life cycle (SDLC) efforts such as: development, integration, testing, training, deployment, operation and/or maintenance. Performs day-to-day management of overall contract support operations, possibly involving multiple projects and groups of personnel at multiple locations. Manages the successful completion of all financial management, contract, subcontract, and procurement activities related to the contract. Organizes, directs, and coordinates the planning and production of all contract support activities. Establishes and alters (as necessary) vendor management structure to direct effective contract support activities. Possesses written and oral communication skills.

### ***The following applies to Level 3 of this position (PPM3):***

The Program Director has the ultimate responsibility for contractor resources and the accomplishment of all work assigned to this contract. Demonstrates the experience and ability to serve as the Contractor's overall on-site manager and coordinator for all work, activities, issues and other contractual obligations relating to this contract. Demonstrates the experience and ability to serve as the Contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Technical Representative (COTR), Government management personnel, and customer Agency representatives. Responsible for the effective management of funds and personnel, and is accountable for the quality and timely delivery of all contractual deliverables. Responsible for formulating and enforcing work and quality standards, assigning contractor schedules, reviewing work discrepancies, and supervising contractor personnel including subcontractors. Accountable for contractor compliance with all applicable Government Contracting clauses (FAR, CAS, etc.). Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Ensures that all required resources are available for program implementation supporting the Agency's strategic goals and objectives and IT Vision.
- Ensures contractor's corporate interests and activities do not conflict with or violate Government restrictions or edicts.
- Assumes responsibility for organizing, directing and managing support services for all applicable technical areas and also for business operations, human resources, and administration activities related to the contract.
- Supports the Deputy Commissioner for Systems in designing, developing, and implementing new and efficient information technologies to support SSA's programmatic, administrative, and management information systems.

### **THIS IS A KEY POSITION.**

### ***The following applies to Level 2 of this position (PPM2):***

The Senior Project Manager shall be the coordinator for complex and large numbers of multiple assignments that, although covered by separate work orders, are closely related under the Technical Areas (tasks) and require effective coordination for successful performance. Must maintain an in-depth knowledge of SSA technical area(s), component organization(s), personnel, and short- and long-term objectives. Reports directly to the Program Director and shall interface with the Contracting Officer's Technical Representative (COTR) and Government management personnel. Must maintain an in-depth knowledge of SSA's lifecycles, standards, and supporting Software Process Improvement (SPI) practices. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Organizes resources to support complex and large numbers of multiple work orders simultaneously and manages the execution of those work orders.
- Plans, directs, and coordinates the activities of assigned personnel and provides technical area leadership across multiple components.
- Conducts oral and written communications on status and issues with the Program Director for planning and control of multiple work orders across multiple components.
- Anticipates issues or problems, and works to mitigate or negate the anticipated effects of the problems. Ensures events and meetings are accurately documented and recorded.
- Responsible for the technical performance of tasks within multiple technical areas and/or components, the coordination of travel and training requirements, and the estimation of required resources for the completion of existing and new statements of work.

**THIS IS A KEY POSITION.**

*The following applies to Level 1 of this position (PPM1):*

The Project Manager shall be the coordinator for multiple assignments that, although covered by separate work orders, are closely related under the Technical Areas (tasks) and require effective coordination for successful performance. Reports directly to the Program Director and shall interface with the Contracting Officer's Technical Representative (COTR) and Government management personnel. Must maintain an in-depth knowledge of SSA technical area(s), component organization(s), personnel, and short- and long-term objectives. Must maintain an in-depth knowledge of SSA's lifecycles, standards, and supporting Software Process Improvement (SPI) practices. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Organizes resources to support multiple work orders simultaneously and manages the execution of those work orders.
- Plans, directs, and coordinates the activities of assigned personnel and provides technical area leadership.
- Conducts oral and written communications on status and issues with the Program Director for planning and control of the multiple work orders.
- Anticipates issues or problems, and works to mitigate or negate the anticipated effects of the problems. Ensures events and meetings are accurately documented and recorded.

- Responsible for the technical performance of tasks within technical area(s) and/or component(s), the coordination of travel and training requirements, and the estimation of required resources for the completion of existing and new statements of work.

**THIS IS A KEY POSITION.**

**Business Operations Specialist (BOS)**

**General Description:**

The Business Operations Specialist supports analyses for program staff disciplines, such as: business operations, human resources, publications and graphics, quality assurance, technical editing, and program administration. Responsibilities include, but are not limited to: personnel functions, labor and cost reporting, document editing, process quality control, and pricing. Possesses general administrative and clerical abilities such as typing, scheduling, filing, timekeeping, presentation preparation, database entry, forms processing, and tracking and management of documentation.

***The following applies to Level 3 of this position (BOS3):***

The Business Operations Specialist shall be responsible for the successful completion of all financial management, contract, subcontract, procurement, quality control, and human resource and administrative activities related to the contract. Reports to the Program Director, but must be able to work independently. Must possess a thorough knowledge of Government contracting provisions and constraints. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Performs complex evaluations of existing procedures, processes, techniques, models, and/or systems in order to resolve contractual issues and increase program efficiency.
- Coordinates work order changes, including, but not limited to, proposal pricing, scheduling, and budgeting.
- Assumes responsibility for Government-compliant invoicing and labor reporting.
- Develops studies and prepares charts, tables, and graphs to assist in analyzing problems.
- Manages financial analysis and preparation of monthly reports.
- Provides daily supervision and direction to the Business Operations Staff.
- Ensures work order, work assignment, work breakdown structures, and necessary levels of associated program reporting are established and maintained for each contract year.

**THIS IS A KEY POSITION.**

***The following applies to Level 2 of this position (BOS2):***

Demonstrates the experience and ability to provide in-depth analyses for program staff disciplines, such as: human resources, labor processing and reporting, procurement and subcontracts, publications and graphics, quality assurance, technical editing, and program administration. Demonstrates the ability to perform without technical oversight or as a leader of

a team as required. Responsibilities include (as applicable) compliance with contract and Federal Government criteria, management of professional staff, customer interface as required, and process control and improvement. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Manages human resources processes and functions.
- Manages timekeeping, Resource Accounting System (RAS) reporting, and cost reporting processes and functions.
- Manages contractual functions such as: contract certifications, implementation of contract changes, resolution of contractual issues, and accurate interpretation of contract terms and conditions.
- Manages procurement and subcontract processes and functions.
- Performs personnel and security/access functions such as: processing new hires and departing employees, conducting orientation, benefits administration, issuing badges, processing applicable forms for networks and buildings access, ensuring contractors have proper clearance, scheduling finger printing, etc.
- Performs cost and schedule analysis.
- Provides input to invoicing, financial reports, and procurement and subcontracts processes.
- Assists with pricing of work orders, work assignments, and proposed changes.
- Prepares presentations, publications, and graphics.
- Manages quality control, quality assurance, and software improvement processes (SPI) processes and functions.
- Assists with inventory and facilities control.
- Assists with technical and non-technical documentation editing and control.

***The following applies to Level 1 of this position (BOS1):***

Demonstrates the ability to provide basic analysis for program staff disciplines such as: business operations, human resources, publications and graphics, quality assurance, technical editing, and program administration. Responsibilities include, but are not limited to: personnel functions, labor and cost reporting, document editing, process quality control, and pricing. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Performs basic functions, such as: timekeeping, standard publications and graphics generation, ordering supplies, maintaining schedules, etc.
- Assists business operations, human resources, and other program staff functions with database maintenance and reports generation.
- Performs forms generation and processing, including: security forms, human resources forms, purchase requisitions, travel forms, etc.
- Assists program management with a variety of office management and administrative tasks.

**Business Process/Requirements Analyst (BPR)****General Description:**

The Business Process/Requirements Analyst provides business process reengineering and/or business/user requirements support for the development of next generation IT applications. Responsible for understanding the needs of the customers and the realities of commercially available IT products and for creating business/user requirements that will allow implementation by the development team and COTS products. Provides business expertise to effectively identify, document, and adapt functional business processes and requirements. Adapts processes to technical solutions based upon comprehensive enterprise application solution sets. Identifies best practices, change and business management techniques, organizational development, activity and data modeling, and/or information systems development methods and practices. Provides business process/requirements support for the following activities: contributing to technical briefings and reports; participating in meetings and walkthroughs; analyzing problems and providing solutions; providing user support; and conducting research. Contributes to recommendations and solutions for complex problems throughout all phases of the Systems Development Life Cycle (SDLC). Supports group facilitation, conduct interviews, and training and additional forms of knowledge transfer.

***The following applies to Level 3 of this position (BPR3):***

Demonstrates the ability and experience in providing information that senior Agency managers and executives may consider when they establish Agency vision and strategic direction for those functional areas that support the defined business disciplines within the enterprise. Demonstrates the ability to identify and recommend best practices, change management, and business management techniques, organizational development, activity and data modeling, or information system development methods and practices. Demonstrates the ability to serve as the key coordinator among multiple project teams to ensure enterprise-wide integration of reengineering and/or requirements efforts. Must demonstrate experience in managing business process reengineering and/or business/user requirements efforts for medium to large scale projects, and project management experience specific to the full SDLC. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Directs the business process reengineering and/or business/user requirements efforts for major projects.
- Oversees business/user requirements efforts as part of a full systems development lifecycle and provide critical recommendations and solutions for complex problems.
- Identifies and addresses barriers and risks to successful project completion.
- Performs cross-functional strategic systems planning, business information systems planning, and business area analysis.

- Provides insight into selecting the enterprise applications that set the direction and establish an approach for the best technical solution.
- Provides expertise on emerging and existing technologies and industry trends that will affect enterprise solution sets, including technical platforms and design architectures.
- Leads design reviews, validates enterprise approaches, defines application systems that support redesigned or improved business processes, and recommends technical architectures that lead to comprehensive business solutions.
- Prepares and analyzes strategic plans.
- Assesses policy needs and provides guidance in policy development.
- Analyzes and defines current and future business environments.
- Establishes and measures Agency-wide technology usage metrics, and performs audits of Agency IT programs.

***The following applies to Level 2 of this position (BPR2):***

Demonstrates the experience and ability to apply process improvement, reengineering, and requirements methodologies and principles to conduct process/requirements analysis, modernization, and improvement projects. Demonstrates the ability to apply facilitation techniques, training, methodology development and evaluation across all phases of analysis, modernization, and improvement projects. Must be able to support components to ensure enterprise-wide integration of reengineering and/or requirements efforts. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Provides guidance and direction across component(s).
- Serves as primary point of contact between SSA user community and the contractor in compiling user/process requirements for information systems development.
- Follows an effective SDLC using a software development process.
- Utilizes appropriate key tools to measure project progress against business-focused requirements.

***The following applies to Level 1 of this position (BPR1):***

Demonstrates the experience and ability to apply process improvement, reengineering, and/or requirements methodologies and principles to conduct process/requirements analysis, modernization, and improvement projects with minimal oversight. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Prepares and analyzing strategic plans.
- Performs process design to identify and analyze existing business-focused processes.

- Performs in requirements engineering to identify, analyze, and document existing and emerging business/user requirements.
- Develops staff skills for effective modeling of software and information structures that contribute to high-productivity new-generation business-focused automation solutions.

### **Computer Systems Analyst/Programmer (CSA)**

#### **General Description:**

The Computer Systems Analyst/Programmer performs analysis, design, and new construction of next generation IT applications. Responsible for understanding the needs of the customers and the realities of commercially available IT products, and creating systems requirements that will allow implementation by the development team and COTS products. Provides application design (including systems requirements), development, testing, and maintenance support for SSA's programmatic, administrative, business intelligence, and strategic analysis software applications. Knowledge and skills in identifying/fixing problems within existing software, designing/implementing new systems, and enhancing existing applications. Identifies best practices and provide technical support for the following activities: establishing and supporting development environments, which include, but are not limited to, server installation, configuration, maintenance, and trouble-shooting; providing technical briefing and reports; participating in meetings and walkthroughs; analyzing problems and providing solutions; providing user support; and conducting research. Provides recommendations and solutions for complex problems throughout all phases of the Systems Development Life Cycle (SDLC). Performs configuration management, software integration, and interpretation of software test results, as well as recommending solutions for unsatisfactory test results.

#### ***The following applies to Level 3 of this position (CSA3):***

Must demonstrates the experience and ability to work with senior Agency technical managers and staff to provide expert-level support for Agency application design (including systems requirements), development, testing, and maintenance support efforts. Possesses experience in identifying and recommending best practices. Demonstrates the experience and ability to serve as the key coordinator among multiple project teams and/or components to ensure enterprise-wide consistency of application development efforts. Must demonstrate experience in managing technical application development projects and systems analysis projects for medium to large scale projects, and project management experience specific to the full SDLC. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Directs the development and maintenance of applications, and provide technical oversight for major projects.



- Oversees the entire systems development lifecycle, including systems requirements, coding, testing, and implementation of proposed systems and provides critical recommendations and solutions for complex problems.
- Identifies and addresses barriers and risks to successful implementation.

***The following applies to Level 2 of this position (CSA2):***

Demonstrates the ability to manage and maintain utility programs, job control language, macros, subroutines and other control modules. Demonstrates the ability to support multi-phases of software systems/application programming. Has accountability for technical efforts on major projects and will develop systems requirements, code, test, and/or implement proposed systems. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Acts as the primary point of contact between SSA user community and the contractor in compiling specifications for information systems development.
- Maintains active liaison with user personnel to ensure continuing responsiveness of applicable system software user requirements.
- Provides technical direction for performing software development tasks and reviewing work products for correctness and adherence to design standards.
- Provides technical assistance to less experienced personnel in the resolution of systems-related problems.
- Assures software and systems quality and functionality.

***The following applies to Level 1 of this position (CSA1):***

Demonstrates the ability to develop, maintain, and support applications, computer/network operating systems, and other system software, through design, coding, unit testing, benchmark testing, modeling, simulation, debugging and documentation. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Participates in all phases of the systems development life cycle, with emphasis on systems requirements, design, development/programming, documentation, testing, and implementation.
- Develops, maintains, and uses applications in mainframe and individual workstation/local area network (IWS/LAN) environments.
- Maintains and supports Agency applications, computer and/or network operating systems, and other system software.
- Performs activities such as: system software installation, configuration, testing, optimization, evaluation, maintenance, documentation, and user support.
- Prepares test data, tests, debugs, and refines applications software.
- Identifies, evaluates, customizes, and implements vendor-supplied software packages.

- Ensures accurate translation of technical specifications into programming specifications.
- Develops systems requirements, codes, tests, and/or implements proposed systems.
- Assists in translating technical specifications into programming specifications.
- Designs and prepares technical reports and documentation.
- Prepares status reports and presentations.

### **Database Engineer (DBE)**

#### **General Description:**

The Database Engineer provides technical database administration support across multiple platforms. Designs, develops, implements, and maintains data repository systems. Develops user training and automate interface capabilities between database systems and other management systems to support the administration of the Agency's programmatic data. Identifies best practices and provide technical support for the following activities: standardizing data names, definitions, usage, and structures; defining database access controls; managing metadata and data element synonyms; and overseeing database administration efforts as part of a full systems development lifecycle. Provides critical recommendations and solutions from the database administration perspective for complex problems throughout all phases of the Systems Development Life Cycle (SDLC); provide technical briefing and reports; participate in meetings and walkthroughs; analyze problems and provide solutions; provide support to application analysis, development, and validation team(s); and conduct research.

#### ***The following applies to Level 3 of this position (DBE3):***

Must demonstrate experience in and ability to manage the development of database projects, including the installation, maintenance, upgrading and administration of full-featured database management systems and related tools. Qualifying experience must include deployment of databases to large organizations and/or user communities. Must demonstrate experience in database administration efforts for medium to large scale projects, and project management experience specific to the full SDLC. Must demonstrate development of lessons learned in large scale database development and deployment. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Directs all aspects of database development and maintenance.
- Provides leadership, technical expertise, and technical oversight in the design, implementation, operation, and maintenance of databases, including the development and testing of logical and physical database designs.
- Guides the development of standards, procedures, and conventions for use.
- Maintains knowledge of leading-edge technologies, new methodologies, and best-practices applicable to work performed.

- Recommends changes to business and technical processes based upon subject matter knowledge.

***The following applies to Level 2 of this position (DBE2):***

Demonstrates the experience and ability to independently plan, analyze, compile requirements, design, develop, and modify database solutions for full-featured database systems and related tools using current products and programming languages, including the installation, monitoring, maintenance, upgrade, and administration of such systems. Demonstrates the experience and ability to plan, design, develop, and modify databases structures, and database administration tools using products and programming languages such as PL/SQL, Visual Basic, or ORACLE Forms. Demonstrates the ability to support application developers in planning preparation, load analysis, and backup and recovery of data. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Directs the development and testing of logical and physical database designs.
- Directs the data analysis, database design, normalization, development, installation, and implementation of databases.
- Directs the maintenance, monitoring, performance tuning, backup and recovery of databases.
- Directs database restructuring activities.
- Works with users and information systems analysis and development staff to determine data storage and access requirements.
- Defines file organization, indexing methods, and security procedures for specific user applications.
- Provides technical expertise and guidance in the design, implementation, operation, and maintenance of database management systems.
- Controls the design and use of database(s); in particular, controls the global view of the database(s), access to the database(s), and the safekeeping of the databases(s), as well as monitors the use of database(s).
- Prepares and delivers presentations on database management system concepts.
- Develops standards, procedures, and conventions for use.
- Analyzes functional business applications and design specifications for functional activities.
- Directs the development of block diagrams and logic flow charts and the translation of detailed design into computer software.
- Directs efforts of specialists in all activities related to administration, planning, and development of computerized database management systems.
- Conducts management studies and defines data requirements.
- Reviews logical and/or physical designs of existing databases, and provides for tuning to ensure maximum operating efficiency.
- Oversees the installation, configuration, and maintenance of database management systems software.

- Installs, configures, and maintains database management systems software.
- Directs the development and implementation of data mining and data warehouse programs.
- Ensures the rigorous applications of information security/information assurance policies, principles and practices in the delivery of data management services.
- Evaluates and provides recommendations on new database technologies and architectures.
- Performs database restructuring activities.

***The following applies to Level 1 of this position (DBE1):***

Demonstrates the ability to provide database design and development, database administration, data warehousing, and other database-related support. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Performs data analysis and database design, development, normalization, installation, and implementation.
- Performs development and testing of logical and physical database designs.
- Reviews logical and physical designs of existing databases and performs tuning and restructuring to ensure maximum operating efficiency.
- Performs maintenance, monitoring, performance tuning, backup, and recovery of databases.
- Works with users and information systems analysis and development staff to determine data storage and access requirements.
- Assists with defining file organization, indexing methods, and security procedures for specific user applications.
- Develops database management system standards, procedures, and conventions for use.
- Prepares and delivers presentations on database management system concepts, standards, procedures, and conventions for use.

**Information Technology Specialist (ITS)**

**General Description:**

The Information Technology Specialist formulates and prepares computer programs used for systems performance measurement and security; participates in the quality assurance review of all new systems development activities; and identifies and provides solutions to technical systems software problems. Possesses hardware and technical software operations knowledge for medium to large scale computer installations; job submission and output criteria and how to debug systems to prevent or resolve errors or malfunctions; data access control techniques and procedures; and machine capabilities and procedures for their effective utilization.

***The following applies to Level 3 of this position (ITS3):***

Demonstrates the experience and ability to manage enterprise-wide information technology projects. Qualifying experience must include experience deploying solutions across organizations with more than 40,000 users across multiple geographic locations and using multiple data center architectures. Must demonstrate extensive knowledge of industry best-practices and lessons-learned in enterprise IT projects and deployments, and experience in the development of best-practices for enterprise size clients. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Manages enterprise-wide IT projects.
- Manages architecture, engineering, deployment, and operations.
- Recommends and implements best-practices in the development and delivery of IT services.
- Provides technical expertise, support, oversight, and needs analysis in functional areas such as, but not limited to, design and development of appropriate IT solutions and architectures, creation of information and decision papers on IT issues, assistance in the development of IT standards, review of logical and physical database and application design, change control and problem resolution, validation and stress-testing of IT solutions, and facilitating the use of IT solutions by end-users.
- Leads process and data modeling initiatives in support of planning and analysis efforts using both manual and automated tools.
- Applies an enterprise-wide set of disciplines for the planning, analysis, design, construction, reverse-engineering, and reengineering of information systems on an enterprise-wide basis or across a major sector of the enterprise.
- Develops, integrates, and deploys enterprise solutions.
- Engineers and manages hardware and software architectures and ensures compatibility and optimal integration of multiple systems. Responsible for technical architecture adherence to plans and specifications.
- Leads the formulation, review, and recommendation of solutions to customer problems based on prior experience and hands-on understanding of how products and services interrelate and support the customer mission.
- Performs needs analysis to define opportunities for new and improved business and process solutions.
- Oversees the performance of feasibility studies and trade off analyses to define system scope and objectives.
- Develops cost estimates for new or modified systems.

***The following applies to Level 2 of this position (ITS2):***

Possesses substantive Information Technology knowledge and has a hands-on background and/or training in areas of analysis of problems and technical requirements in the computing, networking, and application areas. Possesses experience in evaluating, implementing, and

supporting the use of appropriate solutions for these problems and requirements. Demonstrates the experience and ability to provide technical expertise and leadership in exploring, planning, and developing solutions to customer problems. Qualifying experience must include experience in evaluating, implementing, and supporting the use of appropriate solutions for a variety of computing, networking, and application challenges. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Provides technical expertise in more than one technical area/component including, but not limited to: design and development of IT solutions; developing IT standards; review of logical and physical database and application design; change control and problem resolution; validation and testing; and facilitating the use of new solutions with customers and providing a mechanism for feedback and review.
- Leads process and data modeling initiatives, reverse engineering and re-engineering initiatives, compatibility analyses, and other processes, or components thereof.

*The following applies to Level 1 of this position (ITS1):*

Demonstrates the ability to provide analysis of problems and technical requirements in the computing and application areas. Possesses experience in evaluating, implementing, and supporting the use of appropriate solutions for these problems and requirements. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Provides limited support in functional areas such as, but not limited to design and development of IT solutions; developing IT standards; review of logical and physical database and application design; change control and problem resolution; validation and testing; and, facilitating the use of new solutions with customers and providing a mechanism for feedback and review.
- Provides limited assistance in process and data modeling initiatives in support of planning and analysis efforts using both manual and automated tools.
- Assists in application of reverse-engineering and reengineering disciplines to develop migration strategic and planning documents.
- Assists in developing, integrating, and deploying enterprise solutions.
- Assists in the review and recommendation of solutions to customer problems.

**Subject Matter Expert (SME)**

General Description:

The Subject Matter Expert provides advanced technical knowledge and analysis of highly specialized applications and operational environments; high-level functional systems analysis, design, integration, documentation, training, and implementation; and advice on complex

problems. Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, training and presentation phases. Applies principles, methods, and knowledge of specific functional areas of expertise to specific task order requirements. Makes recommendations and advise on organization-wide system improvements, optimization, or maintenance efforts in the following specialties: Information Systems Architecture, Networking, Telecommunications, Automation, Communications Protocols, Risk Management/Electronic Analysis, Software, Life-Cycle Management, Software Development Methodologies, Modeling and Simulation.

***The following applies to Level 4 of this position (SME4):***

SME4 provides advanced technical skill sets above and outside of the remaining set of ITSSC labor categories. SME4 possesses unique subject matter expertise in highly specialized and emerging IT technologies spanning the gamut of applications, operating environments, tools and data management. Examples include: data warehousing and science, compliance analytics, Thunderhead NOW, state-of-the-art self service delivery technologies, unified communications and collaboration, cloud based development platforms and agile development methodologies.

For SME4, approval as an ITSSC resource is based on their superior credentials and industry leading expertise directly relating to a specifically identified SSA IT need. For example, SSA may require an acclaimed Data Scientist with a PHD to help frame an enterprise-wide data mining fraud prevention solution.

SME4 examples include acknowledged industry leaders and/or PHD level:

- Data Scientist
- Expert Scrum Master
- Enterprise wide Agile framework and methodology implementation
- Cyber security and authentication
- Enterprise and program architects and analysts specializing in risk, troubled program remediation, and future state design
- Extensive experience with big data technologies, including AB/testing, data fusion and integration, crowdsourcing, genetic algorithms, machine learning, natural language processing, signal processing, simulation, time series analysis and visualism.
- Confers with client executive management using industry expertise to define the client's strategic enterprise information technology business goals, and advises in the reengineering of high level business processes to meet these goals.
- Demonstrates extensive experience and ability to analyze extremely complex client requirements and recommend solutions.
- Demonstrates extensive experience and ability to provide technical experience in highly specialized technical and professional areas on an enterprise-wide scale.
- Demonstrates experience in deploying professional business and/or technical solutions across organizations with more than 40,000 users, or across smaller complex organizations with public/government/media exposure, or in other organizations where such expertise was relied upon to pursue new technologies, design lines of business, or defend business decisions before third parties. Must demonstrate knowledge of

technologies/business practices and lessons-learned applicable to large enterprises, large scale projects, and enterprise-wide deployments.

- Demonstrates extensive experience in the development of best practices for enterprise-size clients.
- Expert in various software development methodologies (e.g. Agile, Waterfall, etc.)
- Provides expert, independent services and leadership in areas relevant to a particular Task Order by supplying highly technical and specialized guidance concerning deployment of solutions to complex information processing problems.
- Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to Agency counterparts.

***The following applies to Level 3 of this position (SME3):***

Demonstrates the ability to confer with client executive management using industry expertise to define the client's strategic enterprise information technology business goals, and advises in the reengineering of high level business processes to meet these goals. Demonstrates the experience and ability to analyze extremely complex client requirements and recommend sophisticated development or acquisition strategies. Demonstrates the ability to assist client in developing strategic plans and concepts. Demonstrates the ability to advise clients on the impact of new legislation and emerging technologies that are relevant to their activity. Demonstrates the experience and ability to provide technical experience in highly specialized technical and professional areas, on an enterprise-wide scale. Such areas of expertise may include, but are not limited to: human factors engineering, Section 508 compliance, business process/requirements engineering, telecommunications, and other technical and non-technical areas. Qualifying experience must include specific experience in deploying professional business and/or technical solutions across organizations with more than 40,000 users, or across smaller complex organizations with public/government/media exposure, or in other organizations where such expertise was relied upon to pursue new technologies, design lines of business, or defend business decisions before third parties. Must demonstrate knowledge of technologies/business practices and lessons-learned applicable to large enterprises, large scale projects, and enterprise-wide deployments. Must demonstrate experience in the development of best practices for enterprise-size clients. May have specific experience with new and/or leading edge technologies and the deployment of these solutions to enterprise organizations. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Leads transition teams and centers of excellence in seeking and mastering emerging technologies.
- Provides expert, independent services and leadership in areas relevant to a particular task order by supplying highly technical and specialized guidance concerning deployment of automated solutions to complex information processing problems.



- Develops analytical and computational techniques and methodologies for problem solutions.
- Provides technical guidance in software engineering techniques and automated support tools.
- Performs as an expert in the implementation of highly specialized, leading edge information technologies, methodologies, and software tools.
- Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems.
- Coordinates, produces, and/or reviews complex technical documentation such as systems design, system architecture, feasibility studies, and system specifications reflecting detailed knowledge of technical areas.
- Provides technical expertise, support and oversight in one or more technology areas including, but not limited to, data mining, wireless communications, Internet technologies, secure messaging, biometrics, information assurance, public key infrastructure (PKI), Section 508 of the Rehabilitation Act of 1998, and accessibility.
- Provides industry vision and strategic direction with regard to the data enterprise.
- Oversees systems security evaluations, audits, and reviews.
- Develops system security contingency plans and disaster recovery procedures.
- Manages design, testing, and implementation of complex user interfaces.
- Oversees the evaluation of new, highly specialized applications and leading edge software technologies.

***The following applies to Level 2 of this position (SME2):***

Demonstrates the ability to define problems and analyze and develop plans and requirements in the subject matter area for simple to moderately complex systems in the subject matter area. Demonstrates the ability to coordinate and manage the preparation of analysis, evaluations, and recommendations for proper implementation of programs and systems specifications in the areas of risk management; life-cycle management; policy development, methodologies, and modeling; and simulation in the functional area being addressed. Possesses expertise in highly specialized functional or technical areas such as, but not limited to, human factors engineering; Section 508 of the Rehabilitation Act of 1998; accessibility; business process reengineering; and analysis of complex hardware, software, and telecommunications issues. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Provides expert, independent services in areas relevant to a particular task order by supplying highly technical and specialized guidance concerning deployment of automated solutions to complex information processing problems.
- Participates in the development of analytical and computational techniques and methodologies for problem solutions.
- Performs as an expert in the implementation of highly specialized, leading edge information technologies, methodologies, and software tools.

- Participates in the development and application of organization-wide information models for use in designing and building integrated, shared software and database management systems.
- Produces and/or reviews complex technical documentation such as systems design, system architecture, feasibility studies, and system specifications reflecting detailed knowledge of technical areas as identified in the task order requirements.
- Conducts systems security evaluations, audits, and reviews.
- Assists in developing system security contingency plans and disaster recovery procedures.
- Designs, tests, and implements user interfaces.
- Evaluates new applications and software technologies.
- Serves as an expert in the implementation of new technologies, methodologies, and software tools.
- Maintains current subject matter knowledge and provides technical guidance to staff on the process of researching and exploring new technologies.
- Provides recommendations for improving technical documentation, study reports, white papers, and general correspondence responsive to customer requests.

***The following applies to Level 1 of this position (SME1):***

Must demonstrate technical proficiency in applying expert knowledge to solve problems, and consistent efforts to maintain up-to-date skills and knowledge related to the field. Must demonstrate knowledge of technologies/business practices and lessons-learned applicable to projects of scope. Demonstrates the ability to work with minimal technical oversight and/or as a member of a team in a variety of roles. Possesses strong oral and written communications skills to clearly and effectively convey complex technical and business issues to management.

- Assists in the development of analytical and computational techniques and methodologies for problem solutions.
- Assists in the development and application of organization-wide information models for use in designing and building integrated, shared software and database management systems.
- Assists in producing complex technical documentation such as systems design, system architecture, feasibility studies, and system specifications reflecting detailed knowledge of technical areas.
- Participates in conducting systems security evaluations, audits, and reviews; and in developing system security contingency plans and disaster recovery procedures.
- Assists with evaluating new applications and software technologies.

**Systems/Network Engineer (SNE)**

**General Description:**

The Systems/Network Engineer is responsible for the configuration, implementation, and maintenance of various SSA systems/network technologies. Focuses on the administration of the network infrastructure to include desktop PCs; servers; network equipment, including DASD; and software applications. The Systems/Network Administrator/Engineer will identify, assess, and recommend appropriate solutions related to SSA systems/network technologies. Possesses experience with Windows XP/VISTA/2003 Server platforms with an emphasis on Active

Directory; strong background in Exchange 2003/2007 messaging system; and Windows scripting skills. Possesses solid knowledge of LAN/MAN/WAN configurations, to include experience with Cisco routers and switches, Internet firewalls, and wireless technologies. Experience setting up and managing database systems, such as SQL Server.

The SNE is also responsible for integration and implementation of the computer system security solution. Uses a variety of security techniques, technologies, and tools to design, develop, and implement security solutions into highly sensitive computer systems and networks. Secures information resources and/or provide business continuity assurance for the Agency. Directs or performs vulnerability and risk analysis, and participates in a variety of computer security penetration studies during all phases of the system development life cycle. Provides business systems security support for the following activities: contributing to technical briefings and reports; participating in meetings and walkthroughs; analyzing problems and providing solutions; providing user support; and conducting research. Plans, organizes, participates in, and provides direction to a team of specialists in the selection and application of appropriate problem solving methods and techniques.

***The following applies to Level 3 of this position (SNE3):***

Must demonstrate the experience and ability to direct and oversee operations and maintenance activities for voice and data communications networks. Demonstrates ability to conduct protocol analysis and knowledge of LAN and WAN data communications protocols (TCP/IP, ATM, frame relay, X.400, and X.500). Possesses experience in planning and performing fault management, configuration control, and performance monitoring. Demonstrates experience and ability to conduct activation, back-up, deactivation, and restart of network resources/services. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Directs the work of specialists engaged in total Direct Access Storage Device (DASD) operations, management of batch production DASD pools, DASD backup/ error recovery maintenance responsibilities, and batch production program and procedural library updates and maintenance.
- Participates in work groups, conferences, and meetings for the purpose of providing advice and guidance, and obtaining information as to the needs of the organization to become informed on Agency decisions as to necessary courses of action.
- Develops and presents specialized training courses, briefings, and position papers on policies pertaining to complex sophisticated technical matters. Provides technical direction, assistance, and on-the-job training to technical staff as required.
- Leads in the planning, design, documentation, and implementation of various systems to include desktop PC's, servers, network equipment, and software applications.
- Develops, maintains, and monitors procedures for server backups.

- Monitors, plans, and coordinates the distribution of client/server software and service packs.
- Makes recommendations for new equipment and services to purchase and works with various vendors for procurement.
- Performs on-site and remote technical support, and provides emergency on-call support on a rotating schedule.

***The following applies to Level 2 of this position (SNE2):***

Demonstrates the ability to lead operations and maintenance activities for voice and data communications networks. Ability to conduct protocol analysis and knowledge of LAN and WAN data communications protocols (TCP/IP, ATM, frame relay, X.400, and X.500). Demonstrates the ability to plan and perform fault management, configuration control, and performance monitoring. Demonstrates the ability to conduct activation, back-up, deactivation, and restart of network resources/services. Demonstrates the ability to evaluate communications hardware and software, troubleshoot LAN/MAN/WAN and other network-related problems. Demonstrates the ability to perform and supervise general voice and data network administration, and provides technical leadership in the integration and testing of complex large-scale networks. Demonstrates the ability to schedule network conversions and cutovers. Demonstrates ability to coordinate with users, technical teams, and senior management throughout network site(s). Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Assists in the planning, design, documentation, and implementation of various systems to include desktop PC's, servers, network equipment, and software applications.
- Prepares all DASD for operational use within SSA. Analyzes reports to determine whether benchmark guidelines have been achieved and reports findings to other programming and operational support groups throughout SSA.
- Interacts with programming, operational, and technical DASD personnel to manage batch production data pools containing intermediate and temporary disk data sets.
- Develops, maintains, and monitors procedures for all server backups.
- Monitors, plans, and coordinates the distribution of client/server software and service packs.
- Makes recommendations for new equipment and services to purchase and works with various vendors for procurement.
- Performs on-site and remote technical support.
- Organizes and inventories all hardware and software resources.
- Creates and maintains technical documentation.
- Provides emergency on-call support on a rotating schedule.
- Provides leadership on assigned projects to ensure engineering and design meets SSA standards.
- Provides security advice and guidance to engineers.
- Conducts analysis of software designs and implementations from a security perspective and provide solutions.

- Performs security audits, risk analysis, application-level vulnerability testing and reviews.

***The following applies to Level 1 of this position (SNE1):***

Must demonstrate the ability to design, configure, test, implement and maintain network support activities, and ability to support application programmers working in that environment.

Demonstrates ability to provide technical and administrative assistance to personnel responsible for network design, implementation, and operations tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and progress in accordance with schedules. Demonstrates ability to evaluate and resolve network and processor problems. Demonstrates ability to design, configure, and implement networks. Demonstrates ability to evaluate network performance using hardware and software diagnostic tools.

Demonstrates ability to participate in designing, planning, and installing new networks and hardware. Demonstrates ability to evaluate network changes for operational impact.

Demonstrates ability to make recommendations for approval of major network installations.

Demonstrates ability to prepare milestone status reports and deliveries/presentations on network progress. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership.

Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Assists in the planning, design, documentation, and implementation of various systems to include desktop PC's, servers, network equipment, and software applications.
- Provides 1st and 2nd line support of the server infrastructure, including Active Directory, MS Exchange, and backup services, plus management of the firewalls, user accounts, switch and hardware, equipment set up, installation, configuration and support of Windows technologies.
- Performs on-site and remote technical support.
- Assists in the organization and inventory of all hardware and software resources.
- Assists in applying security risk assessment methodology to system development, including threat model development, vulnerability assessments, and resulting security risk analysis.
- Assists in planning, organizing, and participating in the selection and application of appropriate system security and/or business continuity assurance.

**Validation Specialist (VAL)**

**General Description:**

The Validation Specialist is responsible for developing and maintaining validation databases and automated techniques for effective and efficient conduct of systems and acceptance testing.

Designs, develops, implements, and executes test automation software, tools, utilities, and test databases for use in conducting systems and acceptance testing and independent verification and validation activities. Prepares, writes, and reviews validation protocols and documentation to ensure compliance with and adherence to the Software Process Improvement (SPI) group standard processes and procedures. Provides on-going support for SSA standard testing tools, both COTS and SSA-developed. Provides customization of testing tools to meet functional area

requirements. Provides support for designing systems and test architecture(s) (e.g., driver scripts, data stores, etc.); and provide expertise necessary for the expansion of existing SSA standard software tools, such as Quick Test Pro and Quality Center. Provides validation support for the following activities: contributing to technical briefing and reports; participating in meetings and walkthroughs; analyzing problems and providing solutions; providing user support; and conducting research. Contributes to recommendations and solutions for complex problems throughout all phases of the Systems Development Life Cycle (SDLC).

***The following applies to Level 3 of this position (VAL3):***

Demonstrates the experience and ability to plan systems and acceptance test strategies and approaches for independent verification and validation of target application software under test. Must possess data analysis/management skills. Demonstrates the experience and ability to design and develop detailed test procedure specifications for automated execution of system test cycles and simulations. Demonstrates the experience and ability to work without technical oversight and to lead and/or supervise a team of specialists. Possesses superior oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s) across components and/or technical areas.
- Provides guidance and direction across components and acts in a consulting and/or advisory capacity.
- Leads the development of major projects, studies and other assignments to evaluate and develop automated techniques and databases for improved effectiveness of SSA independent verification and validation activities.
- Reviews and evaluates computer hardware and software advances and develops proposals to upgrade or redesign present test systems in order to continue to meet SSA's independent verification and validation needs. Recommends system modifications, expansions, and procedural revisions.
- Designs and develops test databases and other automated tools, utilities, and techniques. Develops guidelines and procedures for the use of test databases and systems testing, and independent verification and validation methods and technology.
- Consults with systems users and developers, and assists them in use of automated systems testing tools.
- Performs market research and evaluation/impact analysis of automated tools (Government or Contractor furnished) and techniques for the automatic generation of test databases.
- Provides the methodology to collect, house, and manipulate all data generated to enable decision support at all levels of management.
- Provides support for requirements-based testing, and automates test tools such as WINRUNNER, TSL scripting language, Quality Center, Test Director, QTP with SPUIFI, QMF, Fileaid for DB2, and other DB2 query tools.
- Performs technical problem prevention/resolution.
- Designs control procedures, investigation process and application of quality investigation for root cause analysis and its impact on products/processes and design.

***The following applies to Level 2 of this position (VAL2):***

Demonstrates the ability to provide an automated system to generate and/or select a proper set of records to thoroughly test and validate all programs, subsystems, and systems. Demonstrates the experience and ability to work independently and/or to lead or supervise a team of specialists. Possesses strong oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Leads and/or directs the efforts of specialists on project(s).
- Designs and develops detailed test automation software that simulate the production system for test purposes and include test automation software components such as COBOL, JCL, JCL Procs, Control-M Schedules and Tables, Command Lists (IBM CLIST language), REXX, Visual Basic and Structured Query Language, and others.
- Executes test cycles according to test plans and test procedure specifications using test automation software, tools, and utilities; and monitors the test cycle for correctness and completeness.
- Evaluates the requirements for test databases and files for SSA independent verification and validation activities, and assures that test file specifications accurately reflect Operational files.
- Consults with performance requirements developers and providers of system services to assure compatibility of procedures and technology and provide advice and assistance in their use.
- Maintains contact with users to provide advisory services, conduct validation studies, conduct training, identify problem areas and determine feasibility of new or modified processes; responds to user recommendations for areas of responsibility.

***The following applies to Level 1 of this position (VAL1):***

Demonstrates the ability to provide technical and validation support of automated techniques for effective and efficient conduct of systems and acceptance testing processes. Demonstrates the ability to work with some technical oversight and/or as a member of a team in a variety of roles ranging from providing assistance to assuming limited leadership. Possesses oral and written communications skills in order to clearly and effectively convey issues, reports, and other deliverables to SSA counterparts.

- Analyzes and resolves abnormal termination of a system test cycle.
- Initiates and analyzes activities with respect to correcting malfunctions in any of test automation software including test tools and utilities.
- Analyzes and reviews databases and recommends modifications to improve integrity and reliability.